

In The Claims:

1-23. (Cancelled)

24. (New) A method of controlling a safety system of a vehicle comprising:
determining a roll rate;
determining a first control pressure in response to roll rate;
determining a roll angle;
determining a second control pressure in response to said roll angle;
determining a final control pressure in response to the first control pressure and
the second control pressure; and
controlling the safety system in response to the final control pressure.

25. (New) A method as recited in claim 24 further comprising determining a
roll acceleration and determining a third control pressure in response to roll acceleration,
wherein determining a final control pressure comprises determining the final control pressure in
response to the first control pressure, the second control pressure and the third control
pressure.

26. (New) A method as recited in claim 24 further comprising determining a
roll signal for control and a deadband and determining a third control pressure in response to
the roll signal for control and the deadband, wherein determining a final control pressure
comprises determining the final control pressure in response to the first control pressure, the
second control pressure and the third control pressure.

27. (New) A method as recited in claim 24 further comprising determining a
roll signal for control and a deadband and determining a third control pressure in response to
the roll signal for control and the deadband, determining a roll acceleration and determining a
fourth control pressure in response to roll acceleration, wherein determining a final control
pressure comprises determining the final control pressure in response to the first control
pressure, the second control pressure, the third control pressure and fourth control pressure.

28. (New) A method as recited in claim 24 wherein the roll rate is a filtered
roll rate.

29. (New) A method as recited in claim 24 wherein determining a control pressure comprises determining a control pressure as a sum of the first control pressure and the second control pressure.

30. (New) A method as recited in claim 24 further comprising determining a derivative dead band; and
wherein the first control pressure is a function the derivative dead band.

31. (New) A method as recited in claim 30 wherein the derivative dead band is a function of lateral acceleration.

32. (New) A method as recited in claim 24 further comprising determining a proportional deadband; and
wherein the second control pressure is a function of the proportional deadband.

33. (New) A method as recited in claim 32 wherein the proportional deadband is a function of vehicle velocity.

34. (New) A method as recited in claim 24 wherein the safety system comprises a rollover control system.

35. (New) A method of controlling a safety system of an automotive vehicle comprising:
determining a proportional pressure term;
determining a derivative pressure term;
determining a final control pressure in response to the proportional control pressure and the derivative control pressure; and
controlling safety system in response to the final control pressure.

36. (New) A method as recited in claim 35 wherein the derivative pressure term is a function of a roll rate.

37. (New) A method as recited in claim 35 wherein the derivative term is a function of roll rate and a derivative dead band

38. (New) A method as recited in claim 35 wherein the derivative dead band is a function of a lateral acceleration.

39. (New) A method as recited in claim 35 wherein the proportional pressure is a function of roll angle.

40. (New) A method as recited in claim 35 wherein the proportional pressure is a function of a proportional deadband.

41. (New) A method as recited in claim 40 wherein the proportional deadband is a function of vehicle velocity.

42. (New) A method as recited in claim 35 further comprising determining a double derivative pressure term; and

determining the final control pressure in response to the proportional control pressure, the derivative control pressure and the double derivative pressure term.

43. (New) A method as recited in claim 35 wherein the double derivative pressure term is a function of a roll acceleration.

44. (New) A method as recited in claim 35 further comprising determining an integral pressure term; and

determining the final control pressure in response to the proportional control pressure, the derivative control pressure and the integral pressure term.

45. (New) A method as recited in claim 35 wherein the integral pressure term is a function of a roll signal for control.

46. (New) A method as recited in claim 35 wherein the integral pressure term is a function of a roll signal for control and an integral deadband.

47. (New) A method as recited in claim 46 wherein the integral deadband is a function of vehicle velocity.

48. (New) A method as recited in claim 35 wherein the roll signal for control is a function of a total roll angle and a reference bank angle.

49. (New) A method as recited in claim 35 further comprising determining a building roll divergence;
holding the proportional pressure term during the building roll divergence.

50. (New) A method as recited in claim 35 further comprising determining a roll signal for control; and
holding the proportional pressure term at a peak in response to the roll signal for control.

51. (New) A method as recited in claim 50 wherein the peak is held for a predetermined amount of time or until the proportional pressure term is above a proportional hold threshold.

52. (New) A method as recited in claim 35 further comprising ramping down the final control pressure at a predetermined rate.

53. (New) A method as recited in claim 35 wherein the predetermined rate corresponds to symmetric value to a hydraulic build rate.